

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for controller configuration and programming, comprising:
 - a controller connected to a power line;
 - a configuration device ~~that can be connected to a network~~ Internet, wherein the configuration device and the controller utilize at least an interface to communicate over the power line and the ~~network~~ Internet to enable remote controller configuration and programming;
 - and
 - the interface implements a peer-to-peer communication network.
2. (Canceled)
3. (Previously Presented) The system of claim 1, the interface contains a globally unique identifier and a serial number to insure unique identification.
4. (Previously Presented) The system of claim 3, the interface is contained within the controller.
5. (Previously Presented) The system of claim 1, the controller is a programmable logic controller (PLC).
6. (Previously Presented) The system of claim 1, the configuration device configures one or more modules associated with the controller.
7. (Previously Presented) The system of claim 1, the configuration device configures the controller by exchanging configuration, data, and down loading a file to the controller.

8. (Previously Presented) The system of claim 7, the down loaded file is an executable software program.

9. (Previously Presented) The system of claim 7, the down loaded file is a web page.

10.-35. (Canceled)

36. (Currently Amended) The system of claim [[32]] 1, the interface is a ~~separate unit~~ separated from the controller and the configuration device.

37. (Previously Presented) The system of claim 36, the power line is connected to the interface and a data communications connection can be made from the interface to particular devices.

38. (Previously Presented) A system for controller configuration and programming, comprising:

a controller connected to a power line; and

a configuration device that can be connected to a wide area network (WAN), wherein the configuration device and the controller utilize at least an interface to communicate over the power line and the network to enable remote controller configuration and programming.

39. (Currently Amended) The system of claim 38, the interface is ~~a separate unit~~ from the controller and the configuration device.

40. (Currently Amended) The system of claim [[38]] 39, the power line is connected to the interface and a data communications connection can be made from the interface to particular devices.

41. (Previously Presented) The system of claim 38, the WAN is the Internet.

42. (Previously Presented) The system of claim 38, the interface is configured using hardware, software, or a combination thereof to create a plurality of virtual networks.
43. (New) The system of claim 38, the interface comprises an address component to read header data to retrieve a destination address.
44. (New) The system of claim 1, the controller comprises a component to create a header for a message and thereafter input the message to the interface.
45. (New) The system of claim 1, the interface comprises a filter to separate high and low frequencies outputting the high frequency to a modulator and providing the low frequencies to a connected device as power.
46. (New) The system of claim 1, the configuration device comprises a diagnostic tool for inconspicuously conducting data monitoring and gathering procedures without knowledge of the controller and also without interfering with operating processes within the controller.
47. (New) The system of claim 47, the configuration device utilizes diagnostic and prognostic data in order to alter control in response to undesirable conditions in the controller.